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Farm · Home · School



THE MACDONALD LASSIE
BY REX WOODS



How Can We Escape the Consequences?

After doing quite well in international affairs for a few years, Canada seems to have come a cropper. Either we're too easily led, or short-sighted, or both. Anyway, whether it's through being misled, or just stumbling, some of our officials have got us into a rather nasty predicament.

Some people sensed early this winter that we had lost our bearings, but they thought perhaps we might wander back to our course of international co-operation before anything serious had befallen us. They were too hopeful. That was shown when the United States announced it would be loosing vast quantities of agricultural products on world markets at prices far below the cost of production.

In a world where two-thirds of the people never have enough to eat, this announcement might have been expected to meet with a joyous reception. But if there was any hat-throwing it hasn't been conspicuous in Canada. In fact, the first reaction was a near-panicky fear that this development would knock our farm prices into the basement. Then Dominion Government sources rushed to assure us that our anti-dumping laws would protect our farmers from unfair competition in Canada. However, our anti-dumping laws can't maintain price levels in other countries that have been buying food from us, and they'll probably buy all the low-priced U.S. supplies they can finance. That means there'll be fewer markets left for Canada, and lower prices. The U.S. action may have kicked our markets right out from under us.

It's rather ironical that this should have happened so soon after the FAO conference where the plan for an International Commodity Clearinghouse met its end and this plan proposed orderly marketing of embarrassing national food surpluses through an international board, so that when too much of a certain product existed in one country it could be cleared to another country where it was needed, at a reduced price.

Apparently the United States did not think much of this plan; and from the reports, neither did the Canadian delegation. With these two major exporters lined up against it, the plan was defeated.

Then, just a few weeks later, the U.S. announced that it was going to unload its tremendous surpluses and take the loss — a far greater loss than would have been sustained on food going through the proposed clearinghouse at the suggested reductions. From this combination of events, it seems probable either that the U.S. opposed any permanent form of international commodity distribution, or that it considered its price-cutting a way of getting its foot in the doors of future customers.

However that may be, our Canadian government now finds itself in a rather embarrassing situation. At the time of the FAO meeting it may have believed that we could get rid of all our surpluses without any international organization, and without any price reduction. Since our prospects have been rather doubtful since last fall, this seems like a rather wobbly position, as well as an extremely nationalistic one. But whatever the reason, we've now lost our chance to take part in a great international scheme to improve world conditions.

Now, we may suffer greatly through the unloading action of the United States. And if we do, we can't expect any special sympathy from the importing countries, which mostly favoured the clearinghouse plan we helped to kill. If Uncle Sam gains permanent control of some of the markets we hoped to secure, he can tell us quite self-righteously: "What are you kicking about? That's just what you'd like to have done, isn't it?"

Our Cover Picture

There are those who claim that our winters are not what they used to be, and supply the editors with pictures like this to prove it. Photo by W. E. Whitehead in front of his home a few years ago.

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Points to Remember in Pruning

The purpose has a lot to do with the way pruning should be carried out. Trees of different ages and conditions require different types of treatment.

by A. N. Nussey

SUCCESS in pruning can't be measured by the amount of brush lying around the orchard after you've finished the job. Many growers have definite ideas about what pruning they should do. But a few important points are sometimes overlooked.

The purpose should first be considered. Trees may be pruned to improve their shape, to influence growth, to improve the quality of the fruit or to repair injury. The purpose of pruning at any particular time depends mostly on the age of the tree. At planting time and during the early years of its life the purpose is to train and shape the tree — to develop a framework capable of supporting large yields of fruit when the tree reaches bearing age. With a mature or bearing tree the purpose of pruning is to maintain proper size and shape and to ease orchard operations like spraying, thinning, picking and harvesting.

The time to prune in the province of Quebec is in March and the early part of April. Pruning should not be done during the fall or mid-winter in this province because of the possibility of winter killing at the pruning cuts.

From the standpoint of training, the distribution of scaffold limbs of the tree is determined during the first few years of its life. In general this early shaping of the tree should be accomplished with the least possible pruning. Young trees which are pruned only lightly during the training period of their early years are larger in size and fruit earlier than trees more heavily pruned.

The One-Year Old Tree

Let us consider the year-old nursery-grown tree. When we receive this tree from the nursery it will be an unbranched whip four to six feet high. When this whip is set in its permanent place in the orchard it should be cut back to about forty inches in height. Heading the whip back to this height will encourage the growth of well spaced lateral branches.

Since the root of the young tree is considerably reduced in size during transplanting the tree may not form any large lateral branches during the first season. However, if growing conditions are good the next season the tree will form several strong lateral branches.

If a good branch has developed about knee height above the ground it can be selected as the lower limb. Three or four additional branches spaced about eight inches apart along the trunk, and radiating in different directions, should be retained. A central upright branch is retained



Each tree requires special treatment.

as a leader. From this leader additional lateral branches are allowed to grow, to develop the framework of the tree as it grows taller.

The Two-Year Old Tree

Consider now the two-year-old nursery tree. When we receive this tree from the nursery it will usually have several lateral branches and it will be necessary to select a leader and four or five well spaced laterals to form the scaffold limbs of the future tree. When the tree is set in its permanent location these selected laterals are usually headed back about one-third of their length, dominance being given to the leader which is left slightly longer than the others. Only limited growth may occur during the first season but normal growth should take place during the following season, and secondary branches will be formed. Additional lateral branches from the central leader will be produced and a limited number can be used in building the framework of the tree.

The Three- to Five-Year Old Tree

The pruning adapted to three-, four-, and five-year-old trees is designed to maintain the proper relationship between the branches which make up the framework of the tree. Very light pruning is required. It consists largely of removing laterals running into the centre of the tree, and thinning out where they get in each other's way. If two branches are crossing or are running parallel in such a way as to cause interference, then the less desirable of the two should be removed. No branch or leader should be allowed to become much larger than the others. Balance can be secured by cutting back the branches showing excessive growth.

Here again, the central leader will produce lateral branches and a number of these should be used in building the upper framework of the tree.

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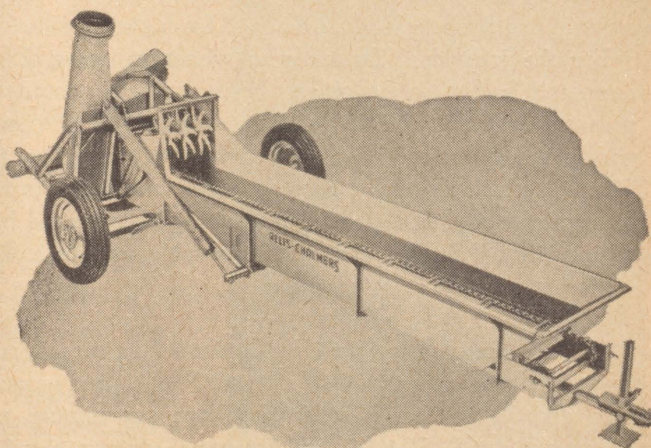
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When the tree is six or seven years old the leader may be headed back one or two feet to a well placed outward-growing lateral, providing the framework of the tree has been satisfactorily established. This heading back of the leader will prevent the tree from becoming too high.

The Bearing Tree

If a bearing tree has been properly trained during its early life, only a light corrective type of pruning will be necessary. The pruning of bearing trees usually involves the removal of interfering branches, watersprouts or suckers from the centre of the tree, and diseased or broken branches. It should not involve the removal of large limbs except in cases of extreme necessity.

It may be necessary to do some heading-back in the top of the tree to prevent the tree from becoming too high. Twenty feet is considered the height at which standard apple trees should be maintained.

The Neglected Tree

If a mature tree has not been pruned for several years it may have become rather dense in the centre, due to the presence of watersprouts or suckers, and it may have more flower buds than its root system can support. Due to the large number of weak flower buds the yields will be light and the quality of the fruit will be low, because of shading and the greater prevalence of diseases and insects in the dense foliage. This condition can be overcome by

heavy pruning, followed by more moderate pruning each year. Pruning will also improve the size of the fruit.

Tools to Use

The tools required to do a good job are pruning shears and a good pruning saw. The saw with the narrow swivel-type blade is the most satisfactory. This type of saw allows the person doing the job to cut off branches growing at any angle or in any position. The shears may be used to remove branches or twigs up to a third of an inch in diameter, and the saw may be used for larger branches. If large limbs must be removed, a heavier saw of the crosscut type may be used.

How to Use Them

In cutting off branches, they should be removed as close to the base of the branch as possible. If a short stump is left the wound cannot heal properly. If a large limb is to be removed from the main trunk it should be cut off about six inches or a foot from the main trunk, sawing first from the under side and then from the upper side. The stump can then be removed without peeling the bark from the main trunk.

Where the pruning cut is more than one half inch in diameter it is advisable to wax the wound with a grafting wax or an asphalt emulsion. There are several commercial brands of asphalt emulsion on the market which are quite satisfactory for this purpose.

What to Look For in Sprayers

Each type of spray equipment is meant for a special purpose, and will not do any other type of job so satisfactorily. This makes it necessary to understand where each one will fit in best. Two general types of sprayers are available—the low pressure type, used chiefly for weed control, and the general purpose type for higher pressures.

For the individual farmer who wishes to spray field crops and for limited use on row crops, a tractor mounted pressure sprayer will do satisfactory work at a comparatively low initial cost. If a large spray program is planned, which requires higher pressures and higher rates of application, then a general purpose sprayer should be selected. The following are features which should be looked for in both types of sprayers.

Pump

For low pressure work the pump should be capable of maintaining a minimum pressure of 50 lbs. per square inch and have a capacity of 3 gallons per minute at operating speed. The general purpose sprayer should maintain a pressure of 50 to 300 lbs. per square inch and a capacity of 6 to 7 gallons per minute at operating speed.

Pressure Regulator

Positive action pumps, such as the rotary gear or piston type, require a pressure regulator. This part may be built into the pump or be a separate unit, but in any case

should be adjustable for the full range of pressures required.

Filters

A suction strainer is required in order to keep dirt particles from causing excessive pump wear. To remove smaller particles and cut down clogging of spray nozzles, a pressure line filter should be located between the pump and the boom.

Booms

Booms should be large enough to conduct the solution to all nozzles without a loss of pressure — in most cases $\frac{1}{2}$ to $\frac{3}{4}$ inch pipe — and should be strong enough and well enough supported to take care of vibration over rough fields and roads. The length of the boom may vary from 15 to 30 feet, depending on the acreage being sprayed. Adjustment must be provided to handle all types of spraying desired. Some sprayers are equipped with an additional hose connection to be used with a broom for stationary work. Drop booms should be available for most crop work. Non-corrosive material is desirable.

Tanks

For low gallonage spraying, a 30 to 40 gallon tank or metal barrel mounted on the tractor is satisfactory. However, for high rate of application or large acreage, tanks should be from 100 to 300 gallons and should have facilities for easy cleaning and draining. For spraying

(Continued on Page 12)

It's a fact



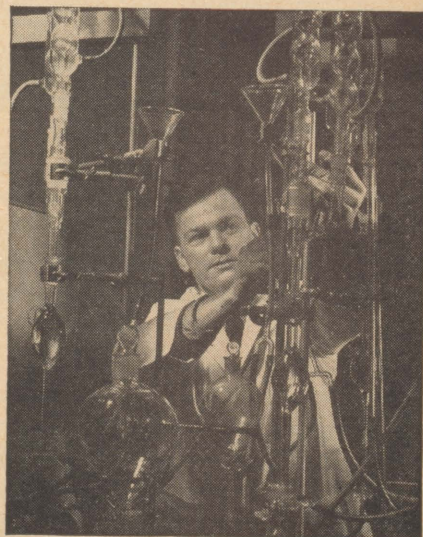
That a Canadian Jersey has Produced 5-1/3 Tons of Butter in 10 Lactations

Brampton Lady Basilua, a Canadian Jersey cow, has made a new world's record for butter fat production . . . 8,970 lbs. of fat (equivalent to 5-1/3 tons of butter) in her first 10 lactations. We salute the cow and her owner and the herdsman who handled her. We also salute the scientists who sought out and disseminated the knowledge of breeding and nutrition that was required to create an animal of such capacity, and to develop and maintain her.

It's a fact

That Oil Research has Developed Over 600 Useful Products from Petroleum

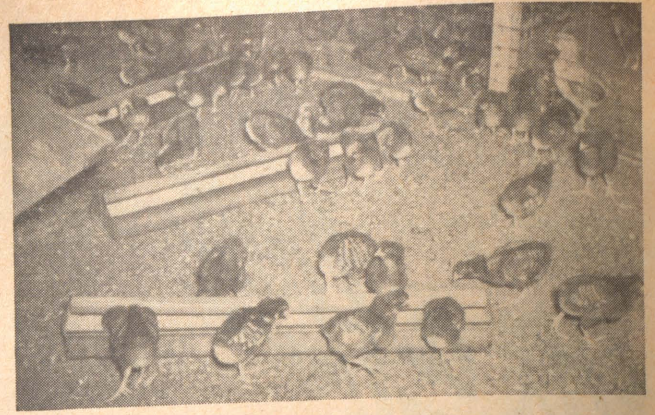
Research men in the oil industry have made what is probably a world's record in broadening the usefulness of a raw product. Time was when the by-products of oil refining were discarded as useless. Today, more than 600 useful products are marketed under the "Esso" trademark. This greater utilization of crude oil has added to our standard of living and helped to hold down the cost of engine fuels, lubricants and heating oils.



IMPERIAL OIL LIMITED
Farm Division

With lower prices for poultry products there's no room for wastage of materials or labour. It's more important than ever to avoid losses of chicks, and to give them a quick start.

by W. A. Maw



Good brooding and feeding in the first few weeks make it possible for chicks to grow into more profitable birds.

Getting off to a Good Start

FOR a quick start in growth and a minimum of losses, chicks should be carefully managed during early brooding. The brooder room or house should be warm, dry and well lighted, and must be free from drafts and dampness on the floor. Individual brooder houses are gaining in popularity. Built on skids for easy moving, each provides room for a stove and a brooder caring for 250 to 300 chicks. In preparing the brooder pen for the chicks, the first essential is cleanliness to avoid possible infection from previous lots of chicks. Thorough washing and disinfecting should be done far enough in advance to allow the house to dry thoroughly before the litter is placed on the floor.

Colony type brooders are most satisfactory under general farm conditions. Of these, the gas brooder has a very limited use because of the few poultry producing areas that have a supply of gas. The wood burner is reasonably satisfactory but its use is practical only where there is abundant supply of wood for fuel. The coal, oil and electrically heated brooders are more generally used and the choice should depend to some extent on the time of the year the brooding is to be done and on the availability of these fuels. Those who raise chicks on a large scale may find it advisable to use more than one type of brooder.

Brooder house equipment will vary greatly, depending on the size of the house and the method of brooding. On large plants, a piped water supply, bucket or belt feed conveyors, and litter carriers will make it easier to care for the flock. Electric lights should be provided where possible. In colony houses, the brooder, a guard fence, roosts toward the end of the brooding season and a sufficient supply of feeders and founts of a size to suit the age of the chicks will meet the usual requirements.

Brooders are manufactured in several sizes and should suit the size of the house and the number of chicks to be brooded. Colony brooders are equipped with a canopy which throws the heat downward towards the floor.

It is advisable to have a guard fence of wire netting, sheet metal or other suitable material to place in a circle about the brooder for the first few days, to keep the young chicks from wandering too far from the source of heat. In the beginning this guard fence can be 12 to 18 inches from the outer edge of the canopy, and the circle can be widened as the chicks become accustomed to their surroundings. It can be removed entirely at the end of the first week.

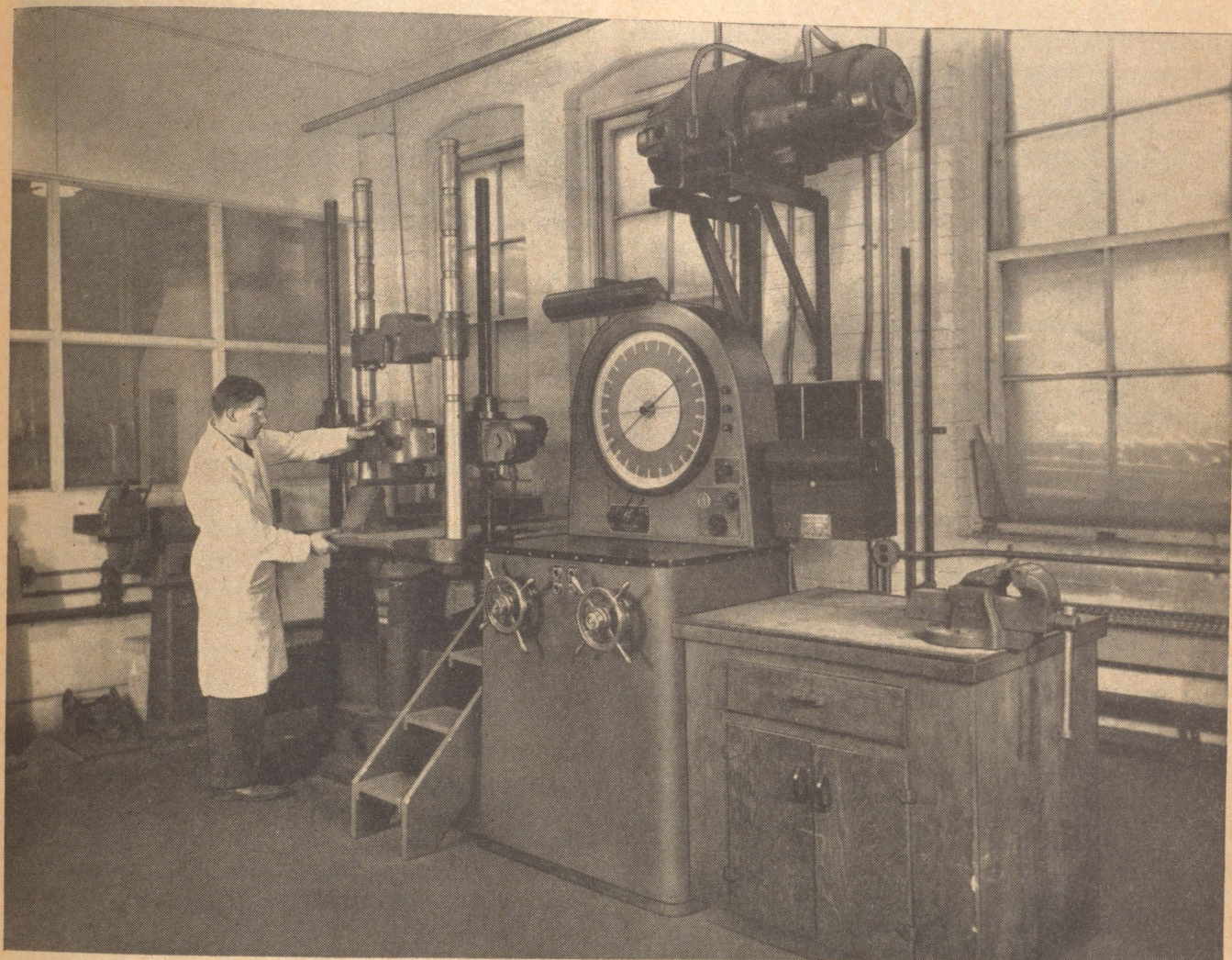
A sufficient supply of sanitary and non-wasting feeders and water founts is necessary. For the first three weeks there should be two one-gallon water founts and one four-foot feeder with feeding space on both sides, for each 100 chicks. After three weeks, the amount of feeding and drinking space should be doubled.

Commercially made metal trough-type feeders with wire guards to exclude the chicks or home-made ones of similar style are satisfactory for the first two weeks. After this, a change should be made to reel-type feeders or hoppers of larger capacity. Metal, glass or stoneware founts are satisfactory for the water supply. Stoneware founts are best for milk or buttermilk. The feeders and founts should always be of such a size that chicks can eat and drink from them comfortably.

Various types of litter may be used, but short material such as cut straw or chaff, planer shavings, rice hulls, oat hulls and peat moss are most satisfactory — alone or in combination with one another or with sand. It is a common practice to put down a layer of sand before the litter is placed on the floor. It is particularly important to place sand around the base of the coal-burning stove and attempt to keep other litter out of this area when the stove is being shaken or ashes are being removed. A metal sheet should be placed on a wooden floor to avoid possible fire if hot coals drop on the floor. Coals sometime fall through the small opening at the base which is used for ventilation.

The brooder stove should be started about two days

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Saving A Bigger Lamb Crop

before the chicks are expected. Examine and check all control mechanisms to be sure they are in working order. Enough heat should be supplied to keep the chicks comfortable. The actual heat requirements of different broods vary somewhat with the vitality of the chicks and the weather at the time they are being brooded. In general, a temperature of from 95 to 100 degrees Fahrenheit at the outer edge of the canopy and about two inches above the floor should be provided in the beginning. This can be reduced about 5 degrees weekly until 80 degrees is reached after which the reduction should be more gradual.

The temperature elsewhere in the brooder house should be about 70 degrees in the beginning and can be lowered to 60 degrees at the close of the brooding period if the weather makes this possible. Healthier chicks are produced when they have an opportunity to exercise in a cooler temperature than that provided under the hover.

At night, the chicks will arrange themselves in a circle about the heater at the distance away that provides the most desirable temperature. Experienced poultrymen often depend entirely on the actions of the chicks as a guide to when they are receiving enough heat. Beginners should use a brooder thermometer which can be suspended from the outer edge of the canopy so that the bulb is about two inches above the floor.

The feed and water containers should be on hand when the chicks are placed with the brooder. Young chicks have a natural tendency to be picking at something and if food is not available, they may pick at the litter, their droppings or each other. It is customary to place the first few feedings on papers and after the chicks have learned to recognize feed they will eat from the feeders. In the beginning about six feedings are given daily. Then as the flock becomes accustomed to eating from the feeders, feed is kept continually before them. Finely cracked grain is usually introduced into the diet between the fourth and sixth weeks. A small amount of finely cut green feed is relished and its use is recommended.

Generally speaking, only one type of feed is used during the brooding period. The starter mash is fed in open hoppers at all times. A feed of small chick-size scratch grain is sometimes given during the first couple days and the mash is also available.

Where chicks are being reared especially for meat stock and broilers or fryers, a special broiler mash is used to get extra fast growth. Much success has resulted from these special broiler rations. It is usually advisable to purchase the balanced starter mashes rather than attempt to make them because of the difficulty in obtaining many of the ingredients.

It is advisable to give fresh feed each day. Do not fill

the hopper to a point which will allow the chicks to waste feed by picking it out onto the floor.

Ewes normally need no assistance at lambing. But, sometimes young ewes, or those with very large lambs or malpresentations may need help. This should be given cautiously and gently. In complicated or difficult cases, it is wise to call a veterinarian.

As soon as the ewe lambs, place her along with her lambs in an individual pen. When this is done the ewe is less likely to disown her lambs, there is no danger of her lambs going astray and the ewe or lambs can be given special treatment without disturbing the remainder of the flock.

Strong, vigorous lambs from well-cared-for ewes need little post-natal attention and should be on their feet trying to nurse within ten or fifteen minutes after birth. Weak or chilled lambs will require extra attention. Weak lambs should be dried off and assisted in getting their first feed. This should be continued every two to four hours until they are able to feed themselves.

Chilled lambs should be wrapped in a heated blanket and placed near a stove. As soon as they become strong enough they should receive the same treatment as weak lambs. Do not keep the lamb away from its mother too long, as she may disown it on its return.

After a particularly hard birth a lamb may be born almost lifeless and without any sign of lung action. Sometimes such lambs may be revived. Remove the mucous from the mouth and nostrils, blow gently into the mouth three or four times, press lightly several times on the ribs, move the front legs back and forth, then repeat the whole procedure several times. If there is life in the lamb, it should be revived by this treatment.

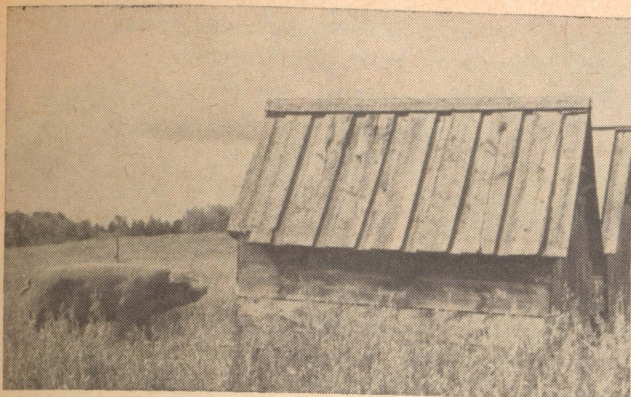
Saving Needless Losses

Pick up nails and small pieces of metal dropped in the cow barn or around hay bunks as soon as they fall. Bits of hardware swallowed by cattle may result in herd losses.

Old nails, screws, small bolts and guarantee tag hooks from feed bags are the chief causes of "hardware disease" in cattle. These materials may puncture a cow's stomach, work forward between the lungs and lodge in or near the heart, causing death.

Trouble from accumulations of hair in the rumen of young cattle also can be prevented "Hair balls" are especially common in the digestive tract of young calves that are penned together and do a lot of sucking of tails and ears.

By finding out if anything is lacking in the animal's diet, serious effects of hair accumulations might be headed off. Since the deficiency is often a lack of a rare or "trace" mineral, make sure cattle have plenty of minerals and salt.



Minnesota No. 1 Correction

The Minnesota No. 1 breed of swine was misrepresented in our November edition, through a slip in the cut lines. The ancestry of this breed is Landrace and Tamworth, both acknowledged bacon breeds.

Another new breed, which is about seven-eighths Landrace and one-eighth Chester White, is also being tested in Canada. The accompanying photo shows a boar of this breed, which is all white.

No general distribution of breeding stock of these new developments will be made until they have proven their value under Canadian conditions.

Cows Know Good Hay

Joe Herauf of Slope county, North Dakota, says that it does not take long for milk cows to prove the difference between good hay and poor hay.

Herauf had a supply of good hay to feed his herd of 10 milk cows, but the good hay ran out and he had to start feeding hay which laid in the windrow during rains last June. When the hay was finally stacked it had lost its green color and was badly leached by the rain.

Milk production fell off right away when the cows started getting this poor hay, Herauf told Stanley W. Bale, Slope county extension agent. This drop in production continued until the cows were giving only about half the milk they did when they were getting good hay.

Herauf is now bringing his cows back to full milk production by feeding an additional amount of grain and protein supplement. But this has raised the cost of producing a pound of butterfat by at least 20 percent over the cost when good hay was being fed.

Hay, cut at the right time and properly cured and stored, so the green color and leaves are kept, is one of the most valuable crops produced on our farms.

Keeps Farm Roads Clear

By throwing up ridges of snow in the fields on each side of his farm road, one farmer has managed to keep his road clear of snow. He used his tractor V-plow to ridge the snow soon after the first heavy fall.

"it's CANADIAN"

"It's Canadian" . . . a phrase known around the world as a guide to quality and fine workmanship. And nowhere can the talent and resourcefulness of Canadian integrity be found more easily than in the Canadian farmer whose efforts and days are sincerely dedicated to maintaining the proud standard of excellence that is revealed in the words, "It's Canadian."

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SUN LIFE OF CANADA

Serious losses of surface soil are occurring in the Maritime Provinces, says G. B. Whiteside, Dominion Government Soil Specialist at Charlottetown, P.E.I. As evidence of the loss of surface soil through water action, Mr. Whiteside cites gullies down slopes, thin patches in crops, the light colour of surface soils, accumulations of fresh soil at the bottom of slopes and the muddiness of streams after heavy rains.

Some of this loss, he says, is due to natural conditions such as the climate, the lie of the land and the type of soil — things that farmers can do very little about. But he has found that these natural conditions that are wearing down the soil are often abetted by farmers.

If you cultivate slopes that are really too steep for cropping or, if you work the land up and down the slope, even where it isn't very steep, Mr. Whiteside says you're asking for trouble. To his list of condemned practices he adds poor grassland management, resulting in a thin cover; the use of row crops on slopes without proper precautions, and cropping systems that tend to deplete the soil.

To completely stop soil erosion on many farms it might be necessary to adopt contour and strip cropping with diversion ditches and interceptor ridges. But he says that,

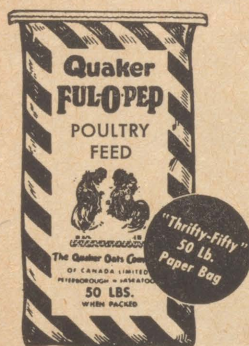
even without such elaborate changes, erosion can be greatly reduced on most farms.

Proper use of the land is the first ingredient in his prescription. He insists that each part of the farm should be used to grow only those crops to which it is suited. Land on steep slopes is best under trees. Where fields on slopes of 12 to 15% are need for cropping, it's a good idea to keep them under grass as much as possible. Well handled grass is very useful for controlling erosion and producing a crop at the same time.

Row crops should not be used on slopes of 10%, unless special systems of cultivation are adopted. One such system is to plant all cultivated crops around the slope.

Other common sense measures for erosion control — measures which are possible on any farm — are the use of suitable crop rotations and the soil treatment needed to keep fertility high. These make sense because they considerably increase returns while conserving the soil for the future.

The more soil fertility is built up, the more effective other conservation practices will be. Fertility can be increased by a well-balanced use of manure, limestone and commercial fertilizers, aided by ploughing down the odd green manure crop where there isn't enough barnyard manure.



NEW FUL-O-PEP "THRIFTY-FIFTY" POULTRY FEED PAPER BAGS REDUCE BAG COSTS—BETTER PROTECT IMPORTANT INGREDIENTS

Ful-O-Pep Poultry and Turkey Feeds are now packed in the new Multiwall "Thrifty-Fifty" Poultry Feed Paper Bags and offer many advantages over the old style jute or cotton feed bags.

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3. Keeps feed fresher—means greater production.
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6. Easier to handle—like a package.
7. Cleaner—siftproof and empty clean.
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Feed dealers and poultrymen are high in their praise of the new Multiwall Ful-O-Pep "Thrifty-Fifty" paper feed bags.

The Quaker Oats Company of Canada Limited

PETERBOROUGH, ONTARIO

SASKATOON, SASKATCHEWAN

Hundreds See Rural Art Show

Do you spend your spare time, writing, reading, playing an instrument, or painting? It has been found that many residents of rural Manitoba devote their leisure hours to self-expression — through the medium of various types of arts and handicrafts

An opportunity to display their various talents was recently afforded rural residents through the Rural Art and Handicraft Exhibit, sponsored by and held in conjunction with the Manitoba Pool Elevators' annual meeting. This is the second art exhibit to be held by Manitoba Pool Elevators.

Of the 62 contributors, with the exception of three entries, all exhibits came from rural Manitoba, and the interest in this Exhibit has shown a mushroom growth. The hall was crowded with 500 visitors, many of them urban dwellers.

There was a most interesting variety shown in the exhibits this year, which featured such articles as Ukrainian needlework and carving; pictures made from various types of wood veneers; papier maché dolls; needle-point; and pastel, oil, and water paintings, as well as some excellent ink sketches.

Seldom has it been possible for rural residents to obtain criticisms, by competent critics, on their various expressive endeavors, and this Art Exhibit is contributing a great deal, not only in having these contributions judged, but by bringing these various works together in one exhibit, and providing enjoyment for others, in the study of these artistic expressions of talent.

F. W. Ransom, former secretary of Manitoba Pool Elevators, gave a splendid description of art and its function in society when he said:

"Art is the highest form of human expression. It is the medium which man uses to picture in motion, form, words and color, his emotions, his ideals and the form and glow of life . . .

"Art excites appreciation, elevates the mind and extends the view to a wider horizon. The spirit of freedom, ever

on the wing, is the genius of art.

"It is the fountain at which imagination slakes its thirst. It peers into the unknown, seeking to discover and unfold to view, ever greater visions for the elevation of the race."—*Manitoba Co-operator.*

It Doesn't Always Pay

There is a danger of following precedent too closely. Many of our cities are snarled in traffic jams today because we are following crooked paths made by cows centuries ago.



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Beef Cow Has Just One Job

A beef cow is usually kept for just one purpose — bearing a healthy calf every year of her life, and nursing it properly. So if the calf is lost the year's return is gone and the cow has been maintained to no purpose, says P. E. Sylvestre of the Division of Animal Husbandry at the Central Experimental Farm, Ottawa.

Good beef husbandry demands the strictest economy in maintaining the beef herd. No more feed than necessary should be given. If the cows are in good flesh at calving time and the roughage is good, little or no grain should be fed. However, if the cows are thin or the roughage of poor quality, then two to three pounds of grain daily, three or four weeks before calving, may prove to be a good investment. This is especially true if calving is to take place in March or April.

The approach of calving is indicated by very definite signs: the abdomen is enlarged. The pinbones are far apart, the udder becomes distended, the teats are filled and the muscles in the pelvic region are relaxed. When these conditions arise, it is best to separate the calving cows from the rest of the herd. Cows that are stall-tied are best placed in box-stalls if available. On the other hand, cows that are loose and have been going out at will, require no special quarters if their shed is free from drafts, and well bedded with clean straw.

At the Central Experimental Farm, Ottawa, it is the practice to have calving take place in an open shed during March and April. As long as an attendant sees that the calf is placed in the warmest corner of the shed, and is not abandoned by its mother, no trouble ensues. No calf has ever been lost on account of low temperature.

There are two normal presentations of the calf: 1. head and front feet first and 2. hind feet first. If presentation is normal, assistance should not be given unless no progress has been made after about two hours. In cases of abnormal presentation, a qualified veterinarian or an experienced herdsman should be called for assistance.

When the calf is born, one should make certain that there is nothing to obstruct breathing. It is also a good thing to disinfect the navel cord with a solution of tincture of iodine to prevent any infection through the navel. After that, the cow and calf should be left alone.

Good healthy calves will soon get up and nurse. If after five or six hours the calf has not nursed, then assistance should be given. The cow's udder should be carefully observed from day to day to prevent any trouble.

Sometimes the calf will not consume all the milk or some teats are so large that the calf will nurse only the smaller ones. In either case, the cow should be milked to prevent the loss of all or part of the udder.

After calving, the cow should be allowed all the roughage and silage she wants, but no concentrates. The later feeding of concentrate should be consistent with economy

and the milk production of the cow. At the Central Experimental Farm, Ottawa, where hay and corn silage form the basic ration, no concentrate is fed. True, the cow loses weight, but no calf has ever been found wanting.

"JOE BEAVER"

By Ed Nofziger and Kip Koenig



Forest Service, U. S. Department of Agriculture

"Some people just have to be educated by law enforcement."

What to Look For

(Continued from Page 4)

materials in suspension such as DDT, it is necessary to have some means of agitation. A means of calibrating the tank is very desirable.

Nozzles

Fan nozzles, with or without replacement tips are generally used and perform very satisfactorily if they are properly designed to give a uniform coverage and equal rate of flow. Tests at the Central Experimental Farm, Ottawa, says D. J. Cooper, Soils and Agricultural Engineering Branch, have shown that solid cone nozzles of good design are as satisfactory as the fan type; but they are usually more expensive. Tests also showed that most nozzles will not perform satisfactorily below 35 lbs. pressure.

Hose

Garden hose may be employed in low pressure weed work if oils are not used. High pressure hose is required for high pressure spraying, and oil-resistant hose is necessary if Stoddard's solvent or similar oils are to be used.



DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Quebec Barley Winner is Named

REAL PRIMEAU, of St. Philomene de Chateauguay, was proclaimed the provincial barley king last month when the results of the National Barley Contest in Quebec were announced. The winner was acclaimed at a mammoth banquet given by the Quebec Brewers' Association in the Queen's Hotel in Montreal, in the presence of other high-scoring growers, Department of Agriculture officials, executives of the brewing companies, and many other distinguished guests.

Other winners in the provincial contest were:

2nd prize—Orville Smart, Shawville.

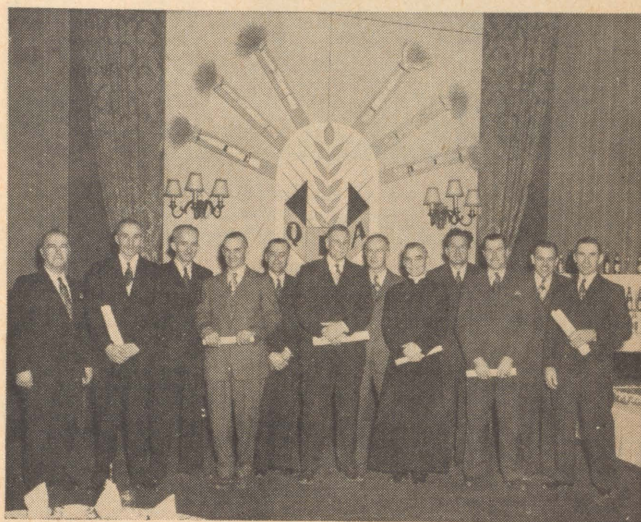
3rd prize—Henri Brault, Ste. Martine.

4th prize—Rosario Brault, St. Edouard.

5th prize—Agricultural Orphanage of Cedars-Soulanges.

This year, farmers from forty-three counties in the province were eligible, and two hundred and forty-one growers entered the competition. Some measure of the popularity of the contest among Quebec farmers is given by the fact that to enter the contest a farmer must agree to sow at least five acres of either Montcalm or O.A.C. 21 barley, and give special cleaning to a minimum of forty bushels of his harvest.

There is nothing slipshod about the way the contest is handled. First of all, the growing crops of every contestant are examined in the field during the summer, and scored. Any crop which does not score at least 60% is



The six regional winners with their agronomes. From left to right: A. Landry, agronome, with Eustache Desnoyers, district 1; D. Fortin and Elphege Lagace, St. Hyacinthe, district 6; J. A. Lafortune and Eugene Joly, St. Francois de Sales, district 4; J. A. Parenteau and Abbe Lemay, St. Therese Seminary, district 2; J. Auger and Victor Chagnon, district 5; G. Ampleman and Henri Brault, Ste. Martine, district 3.

rejected then and there. One hundred and eighty-seven contestants survived this first round.

The next stage in judging came in the fall, when crop samples were inspected. At this stage, lack of proper cleaning, and grasshopper damage, further reduced the number of contestants to a final group of one hundred and thirty-six. Their samples went on to the final stage of laboratory testing and analysis.

The area of the contest was divided into six regions, for administrative purposes, and a separate regional contest was held in each. The regional winners were published in our last issue. The first three winners from each district were eligible to compete in the Provincial Contest, and their samples were judged on January 11th by Messrs. Paul Vezina and J. E. Chevette, professors of agronomy at Oka and Ste. Anne de la Pocatiere, and Paul Gervais, Lennoxville agronomist. Advisors to the judges were Prof. E. A. Lods of Macdonald College and J. P. Dax of the Canada Malting Company.

Contest Has Brought Results

The purpose behind this contest, which was first organized in 1946, is to improve the quality of malting and feed barley available in Quebec, through the use of high quality seed of good varieties, proper growing



The Quebec barley king, Real Primeau, with C. H. Hanson, president of the Quebec Brewers' Association. In the background is Andre Auger, Chief, Field Husbandry Division.



Paul Methot, Director of the barley contest in Quebec, and Prof. E. A. Lods, creator of Montcalm barley, examine a sample of the championship crop.

methods, and careful cleaning of the crop. The improvement in quality during the past four years is best expressed in a table of figures.

Year	No. of final samples	Percentage of samples graded			
		No. 1	No. 2	No. 3	Rejected
1946	227	26	19	9	46
1947	170	35	32	8	25
1948	165	59	24	5	12
1949	136	69	16	10	5

The steady increase in the percentage of samples in class No. 1, and the equally steady decrease in the number of rejected samples, is a clear indication of the improvement in growing and cleaning methods practised by the growers.

Another important advance has been in the yield. In 1949, the average yields obtained by the contestants was 45.6 bushels per acre, as against an average for the province of 22 bushels. The average barley acreage cultivated by the surviving 136 contestants was 9 arpents, at least two and a half times the area reported for 1946.

Special mention must be made of the quality of the grain produced in District No. 3, comprising the counties of Chateauguay and Beauharnois-Soulanges.

Of 30 samples analysed from here, none were rejected: none of them contained any weed seeds, 76.6% contained no other grain seeds, and of the remainder, none had more than 20 other seeds per pound. Growers from this district took three of the five provincial prizes, and it was pointed out that there is a lot of good barley seed available for purchase from these growers.

The contest was a huge success in 1949, and everyone applauds the announcement that the contest will be continued, along the same lines, in 1950. Similar contests are held in the other four grain-growing provinces of Canada. Administration is under the Barley Improvement Institute, Winnipeg, in co-operation with the Federal and Provincial Departments of Agriculture and various agricultural colleges.

With the Shorthorn Breeders

Quebec Shorthorn breeders held their annual meeting in Montreal during January to review the progress made during 1949 and to look over the situation for 1950. The president, J. P. MacIntosh, was in the chair.

Secretary MacMillan reported a total of 139 members in the association. During the year 574 head were registered and 464 transfers were recorded.

Shorthorns predominate in the Eastern Townships, Lachute, Pontiac-Gatineau and in Megantic and Frontenac counties, and herds are being formed in certain counties on the South Shore, such as Bellechasse, Dorchester and Montmagny, where the dual-purpose type is popular. Stock has also been introduced in Portneuf and Lotbiniere, and in the eastern part of Abitibi, chiefly through the efforts of Paul Boutet, agricultural agent for the C.N.R.

It was the general feeling that much of the growth in popularity of beef production, at least in the Eastern Townships and in Pontiac, has been due to the young breeders' clubs. In these two districts, there are 11 clubs with 150 members, all of whom are ardent beef cattle men. The Federal government plans to place some ten sires in these breeding centres, including Lake St. John, where beef cattle are gradually being introduced.

Prof. Hamilton reported on experiments conducted at Macdonald College, detailed results of which will soon be published in bulletin form, and P. E. Sylvestre described breeding work that has been going on in the Southern States to develop an animal that can stand the hot, humid weather there. Crosses between Hereford and Angus cattle with imports from India, South Africa and France seem to be doing the trick, for resistance has been greatly increased.

Using Brooders for Pigs

If you are using an electric pig brooder for the first time this year, place the little pigs under the brooder by hand, the first time or two. Soon, they'll go under the brooder by themselves.

If the pigs don't use the brooder, it probably is not furnishing enough heat. If you are using light bulbs for heat, try a bigger watt bulb. A 100 or 200-watt bulb should do the job.

With either a light bulb or heating unit, be sure there is hardware cloth between it and the pigs. Otherwise, the pigs may push straw against the heat source and start a fire.

Heat Kills Brucellosis Germs

Brucellosis germs are readily killed by heat. That is why pasteurization of milk is important in avoiding brucellosis infection.

Ayrshire Breeders Review the Year



President Trepanier congratulates Henri Girard on winning one of the door prizes at the annual meeting of the Quebec Ayrshire Society.

Members of the Quebec Ayrshire Breeders' Society, gathered at Montreal for their annual meeting on January 19th, had the unique distinction of having the deputy minister of agriculture presiding over the business sessions in his capacity as president of the Association. Mr. Rene Trepanier was the recipient of many expressions of confidence in his ability to carry out his new and important duties in the Department of Agriculture.

The meeting was attended by some 200 delegates from the 20 regional clubs in the province, this being about one-fifth of the total membership of the Society, which is given as 973. In his report, Secretary Boulais stressed the need for a drive for new members, setting 1000 paid-up members as the minimum objective for 1950.

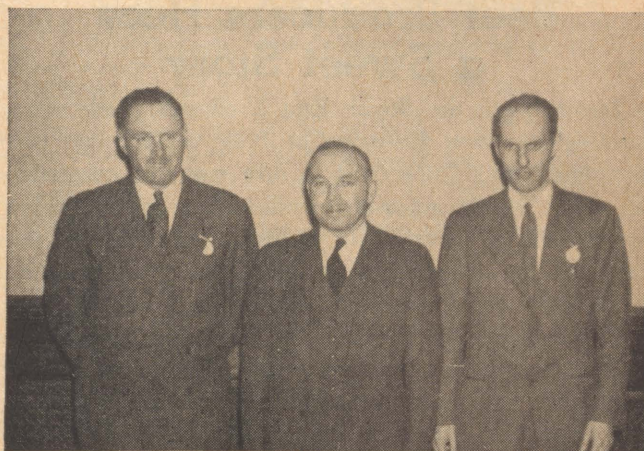
Registrations during the past year showed a gain over 1948 (6248 as compared with 5624) and a decrease in transfers, from 5709 to 4525. Nine Red and White Days were held in various parts of the province, at which a total of 105 exhibitors showed 730 head; it is noted that the animals shown were all well prepared, and the showmanship was good. A good part of the Society's budget went to providing prizes for these shows, and these activities accounted for a considerable amount of the fieldman's time. In fact, there were few activities going on in the

province which concerned Ayrshires, which were not attended by some official of the Society. Trophies were provided for the Sherbrooke, Quebec and Victoriaville Fairs.

The meeting endorsed the idea of holding a public sale every year, leaving arrangements in the hands of the executive, but this does not mean that local clubs should not continue to organize their own auction sales as in the past.

It was suggested that secretaries of all local clubs should meet once a year to plan advertising and propaganda for the breed, with the idea of having every local club take an active part in this very important work, instead of leaving it entirely in the hands of the provincial executive.

No guest speaker had been invited for the luncheon meeting, but brief talks were heard from Mr. W. Erskine Rodgers, vice-president of the National Association, Abbe Tardif, farm manager at Ste. Anne de la Pocatiere, Gustave Toupin, Oka, Stan Chagnon, past president, A. Lavallee, M.L.A., J. P. Fleury, Federal fieldman and Nolasque April, president of the Corporation des Agronomes.



Ayrshire Society officers — Roland Pigeon, incoming president; Rene Trepanier, retiring president; F. Boulais, secretary-fieldman.

Another Step in the New Sheep Programme

A further step in preparing for the introduction of the new sheep-breeding policy (described in a previous issue) was taken in January. Officials of the Animal Husbandry Division of the Department of Agriculture, and selected agronomes, met at Macdonald College to discuss the proposition, to see some of the Macdonald sheep, and to try to plan how best to put the scheme into operation in the districts that will be selected.

J. W. Graham of the Federal Department went over the scheme in detail once again, and further explanations

were given by Pierre Labrecque and Henri Gautreau of the Quebec Department. They emphasized that the changeover can be done without great changes in the present policies, except in the details of breeds to be encouraged: the present ram-loan policy will continue. As Mr. Gautreau pointed out, the scheme will work as follows. One group of breeders will undertake to cross Leicester ewes with Cheviot rams to be loaned by Quebec. The half-bred ewes from these crosses will be placed with blackface rams, to give the market lamb crop.

It was emphasized that this scheme will have to be sold to the farmers, and to do this many demonstrations will have to be given — at field days, at fairs and exhibitions, in fact, everywhere the occasion presents itself. In general, the agronomes, who are the ones that will have to do the promoting of the scheme, agreed that, once the plan could be put into effect, there should be a great change evident within 10 years in the quality of market lambs raised in Quebec.



J. A. Denis looks over some of the North Country Cheviots at Macdonald College, while other sheep specialists look on.

Beet Producers Hear a Sweet Story

Members of the Sugar Beet Producers Association, meeting to review the events of 1949, decided that preparations should be started to take over the ownership of the St. Hilaire refinery. It will be recalled that when the Provincial Government undertook to establish this new industry in Quebec, it was on the understanding that, while the Government would operate the refinery in its early years, it would eventually be turned over to the co-operative, as soon as seemed safe. The question as to how and when the association could take over the plant will be studied during the year and a report on this will be made at the next annual meeting.

Mr. Louis Pasquier, the manager of the refinery, stated that, although at the time of the meeting final figures were not available, it was clear that no deficit had been incurred during 1949. The plant received 68,547 tons of beets, and turned out 17,400,000 pounds of sugar, 3,000 tons of molasses and 3,633 tons of beet pulp. Operations had gone smoothly; there had been hardly any shut-downs. Daily production showed a steady increase, and better operating methods had resulted in producing more sugar with less expense. In 1947, 125 tons of coal had to be used to process 877 tons of beets: in 1948, 110 tons of coal processed 936 tons of beets: in 1949, 95 tons of coal were enough to process 1135 tons of beets.

Sugar content of the beets was lower in 1949, averaging 15.3 as against 16.9 in 1948. The heavy rains in September

were apparently responsible for the reduction.

The man responsible for the field work is J. E. Lemire, and he reported that, on the average, beets yielded 11 tons per acre, which represented a money value of \$143, as compared with \$124 in 1948. Beets were grown for the factory on 2,178 farms in 34 counties. St. Hyacinthe county led the rest with a total production of 23,914 tons. Farmers in St. Hyacinthe collected \$310,832, or an average of \$540 each. Napierville, Vercheres, Bagot, Rouville all produced between 4000 and 6000 tons, and the four northern counties of Berthier, Montcalm, Joliette and l'Assomption produced 9000 tons.

Says Co-ops Strengthen World's Backbone

"Rural people are the backbone of the world's economy; co-operatives help to strengthen that backbone," said Raymond Miller, speaking on behalf of Norris E. Dodd, Director General of the Food and Agriculture Committee of the United Nations. Dr. Miller was addressing the annual conference of the International Federation of Agricultural Producers at Guelph, Ont.

Telling of informal discussions held already on co-operative development by representatives of FAO working in South Asia and North America, the speaker announced that conferences of co-operative leaders would be assisted by FAO personnel as quickly as funds are available and requests are received from national governments. Governments can create the conditions under which co-operatives can rise and flourish if free people will learn to work with each other.

A hundred and twenty-five delegates from 25 countries at the IFAP Meeting in Ontario Agricultural College referred Dr. Miller's message to the special sub-committee on Agricultural Co-operatives where it became a feature subject of discussion. After this committee, under the chairmanship of Dr. A. Hermes of Germany, reported to the general sessions, I.F.A.P. called for continuous and close collaboration with F.A.O. on a practical program of agricultural co-operatives which should include:

(a) Sponsoring of regional and international conferences on agricultural co-operation; educational service of extension types to assist member countries in enlightening agricultural producers and leaders as to the advantages, principles, organization and methods of co-operative enterprise; exchange of co-operative personnel as a means of employee training;

(b) The creation of an international educational centre on agricultural co-operation. This centre should be in a position to function as soon as possible and should start gathering information on the best educational methods in those countries where co-operation has already developed extensively. Also promote within established colleges and universities courses on agricultural co-operation.

Strippings

by Gordon W. Geddes

It looks as if there are bigger hogs in the marketing end of the hog business than the farmer sends in to market. Mr. Gardiner told us to look for not more than a 10% drop in hog prices as a result of the lower export contract price in spite of the \$32.50 floor price. During 1949 we made ten shipments to the Montreal market. Four of these were made after the November drop when we got only \$29 on three of them and 29.25 on one. We did not ship any at anywhere near the year's top prices as the best we got was \$32 in January. In fact we struck a down market on our shipments all through the year.

As an example on one occasion hogs made \$34 one week. We shipped the next week for \$30.50 and two weeks later the price was \$36. In spite of our poor luck in hitting the market, our average for the year was \$30. A fair average with some of the tops included might have been higher. Gardiner emphasized that the drop might be less than the 10% because of the strength of the home market. Ten per cent off our average would result in a price of \$27 while the market is down to \$26 already. Too fast gains are not good for any hog whether he is being marketed or marketing some of his relations. If the farmers get too raw a deal there will be no hogs to steal next year and even excessive profits on hogs now on hand will scarcely be enough for the packer to retire on. So let's put the pressure on for a fair share of what there is and while we are at it, why not take up the matter of too much fluctuation in price. Some farmers gain on the high spots but the total effect is bad for the hog business.

So much for the present but what about the future when the floor price goes off in July? Gardiner proposes opening the U.S. market as a substitute but farmers down there are being advised to rush their hogs to market before support prices end the last of March. Our last experience with the U.S. hog market was when cheap pork was imported from there in 1940. Is there justification for a continued support price on hogs? There certainly

HOW TO KEEP CHICKS ALIVE AND HEALTHY

Every year countless chicks die because of faulty management. Many others manage to stay alive but they will never, because of poor health, be profit makers for their owners. Successful poultry farming demands the type of good management outlined below. Check to see if a neglect of any basic rule is costing you money.



1 BROODER HOUSE — Unless the brooder house is new, it should be thoroughly cleaned and disinfected before chicks move in . . . preferably a month before to allow for complete drying. Wash down (preferably with a pressure hose) and use a strong hot lye solution and stiff push brush to remove caked material. Disinfect when dry. All equipment should be thoroughly cleaned and disinfected.



2 FEEDING — Chicks should be fed before they are 36 hours old. Allow each chick one inch of hopper space for the first five weeks, and then allow two inches. Until chicks are six to eight weeks old, feed Miracle Chick Starter. A perfectly balanced and scientifically tested feed, Miracle Chick Starter contains all the elements needed — proteins, carbohydrates, fats, vitamins and minerals — to bring your chicks through the dangerous early stage in good health and vigour. Feed chicks amply enough so that they will not eat the litter. Also see that they have plenty of fresh water, lukewarm for the first five days, and sprinkle grit on top of Miracle Chick Starter three times a week.



3 CHANGING LITTER — Change litter when too dirty or damp. Disinfect when necessary. Try to keep litter absolutely dry by turning every day and stirring thoroughly with a fork.



4 BROODER TEMPERATURE — Chicks are ruined by too much heat and also by too little. The brooder temperature (95° under brooder is usual) should be accurately adjusted according to climatic and brooder house conditions before they move in. After the first week, reduce the brooder temperature about 1° a day until chicks are seven to eight weeks old when the brooder should no longer be needed.



5 VENTILATION — Chicks need plenty of fresh, pure air. Brooder houses should be adequately ventilated and the ventilation should be gradually increased to acclimatize birds to natural weather conditions. A foot-high guard around the hover will protect chicks from draughts.



6 SELECTION OF LITTER — No litter is perfect, but tests have shown that litters made from either wood shavings, peat moss or straw, are more satisfactory than some other types. A deep layer with good absorptive power is necessary. To ensure cleanliness, litter can be covered with newspaper for first few days, and top sheet of paper removed once daily or oftener.



7 6 TO 8 WEEKS — When chicks are six to eight weeks old, keep building a profit-making flock by gradually mixing in Miracle Growing Mash until this is the complete diet. Miracle Growing Mash is specially compounded to supply all the needs of pullets . . . to mature them earlier and get them into production around five months. Pullets also develop a sturdy frame capable of withstanding heavy laying.



"MIRACLE"
CHICK STARTER

must be as long as other classes insist on holding up the prices of the things the farmer must buy to an artificial level. Until costs go down, farm produce sold on the home market should be maintained in price and not have the exportable surplus fix the price for it all.

As a preparation for the bad news he had for the farmers, Gardiner included in his speech to the Canadian Agricultural convention figures to show how well paid the Canadian farmer was last year. Since he did not also quote comparative cost prices to farmers in the same countries, someone else should do so. A statement on the farm outlook in the U.S. for 1950 is to the effect that farm prices will be 100% of parity for the first time in eight years. It is only because they follow so many above-parity years that they look low. If we were to get parity prices, they would be up and not down on farm goods.

If anyone still has enough interest in hogs to want to know how we came out with the sick bunch mentioned at last writing, they are all still with us and cured of that particular trouble. I still think that only sulphur could have saved them. It does not seem as if our ration could have been the cause as I have since seen a recommended growing ration of 851 lbs. barley and 15 lbs. hog concentrate. When the hog business looks bad we all begin to wonder where we can save on our costs. Why can't the farmer buy tankage any more? We now have to pay a prohibitive price for hog concentrate containing a sprinkle of tankage and 35% of protein or else use a vegetable protein. Part animal protein is essential for satisfactory gains in hogs to get what has been referred to as the animal protein factor for years. It was not known just what it was but it seemed necessary for hogs and poultry. In the U.S. this element, known as APF, can now be made in the laboratory and with its use the vegetable proteins are quite satisfactory. But unless such a thing can be made available to us, we must depend on the natural animal proteins for it. Where are they all?

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FEEDS
FOR
POULTRY, HORSES
& CATTLE

To-day is the first real winter we have had. We tried to make good use of what little snow for sleighing there has been as Ivan hauled manure with one team and I hauled wood with the other. When there was no snow at all, we picked up the down wood and small dead saplings in the second growth. We didn't think there was very much of that kind left but it made quite a pile. For one thing there were a lot of the small red cherries that usually grow in the fences. We always called them pin-cherries but perhaps that is not the correct name. In the woods they made a much larger growth though they might well be called a weed-tree for they haven't much value. However they were ready to cut and will make some heat as there were forty to fifty feet tall and several inches through at the base. Ivan thought we should put some in at the saw-mill and have the first pin-cherry lumber ever sawed. It will take a lot of wood now that Ivan has his own house. This year we have enough sugar-wood so it will not be any more of a job than usual only we shall have some poorer wood for the houses.

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Film and You

by Elizabeth W. Loosley

"We are planning for a Fourth Night and would like to use films. What can you suggest?" "Our Women's Institute is studying Denmark this year. Are there any films about life in Denmark that we can get?" "Our Community Association runs Saturday morning film showings for children. Where can we find suitable movies?"

More and more letters like these are coming in to the Information Centre. In spite of difficulties in getting hold of projectors and operators, as well as films, local groups are using films in their programs more and more. Anyone who has ever been in charge of a film program knows only too well the hideous things that can happen — the power that goes off; the projector that chews and spits out film; the brat who specializes in pulling out plugs; the film that turns up the day after the "showing"! But he also knows how much sheer enjoyment a film adds to any program.

This year the Information Centre is in the fortunate position of having some money to buy film to keep in the Adult Education Service for distribution to local groups. Besides these films, we also have a number of films loaned to us by the National Film Board and the National Film Society. To encourage the use of films, we have been loaning these films free of rental charge.

But perhaps you say "Our group wanted a film on recreation 'Playtown U.S.A.', but we had to pay for it, even though it was listed in your 'Speakers' Pool and Program Guide'! Why should we have to pay when other groups get their films free?"

This is one of the great difficulties we run into in the circulation of film. We want people to use films which fit in with the topic of their meeting, not just "any film". There aren't nearly enough copies of films available yet in Canada, and films are very expensive items to buy. We ask the National Film Board and the National Film Society to loan us certain films we know will be used by our groups. But these overworked and under financed organizations can let us have only a few of the films we want and can use. What copies there are must be fairly distributed among all film libraries.

This is what happens. You write in about a week ahead of your meeting and say you want a film on a certain subject. We look at our films right away to see if we have one on hand that will fit. If we haven't, we write immediately to the National Film Society in Ottawa. This organization (which is entirely separate from the National Film Board) is the central loan agency for film in our area. The National Film Board no longer loans films, except in rare circumstances. We have our quota on deposit, and we have no right to ask for more. This leaves the National Film Board free to concentrate on education in the use of films; the formation of local film libraries

and councils; and the production of films. The National Film Society (which is a voluntary organization supported by membership fees and rental charges on films) has taken over the distribution of films, National Film Board films and many others as well. For the quick service given by the National Film Society, we naturally have to pay. So that is why you sometimes have to pay a rental charge when you book a film through the Information Centre, when the film you want is not in its library.

As the use of film increases, the Information Centre, too, must think about rental charges. The wear on film which is constantly used is considerable. Some reserve for buying new films must be built up. Against this is the knowledge that local groups cannot afford large amounts of money for film in their programs. It is a big problem; and like most important problems, it can be solved only if everyone concerned understands what it is and will work together to do something about it.

Can Get A Catalogue

And so this is the situation at the present time. If you have any ideas about how the service to your group may be improved, please let us know. We have a catalogue of the films now in the Information Centre, which is sent out free of charge. Among the recent films we have bought are "Who Will Teach Your Child", a fairly long and dramatic treatment of the teaching profession; "Rural Health", the development of Manitoba's first health unit; "Farm Homes Beautiful", a film in colour about more attractive farm buildings and grounds; and "Opening of Parliament", an intensely interesting description of the ceremony and tradition symbolizing our free government. From our lists here, we can suggest many films on a wide range of topics, and give help in the best way of using them.

If your group is interested in making better use of film, there is an excellent introduction in "Film and You". We have it here in our own film library. Book it in plenty of time through the Information Centre, Adult Education Service, Macdonald College.

Safety First with Electricity

Avoid handling electric cords and appliances when your hands are wet, or when you are standing on wet floors, or reaching for a faucet or other grounded object.

Gardens for Vitamins

A well-planned garden can give your family most of the Vitamin A and Vitamin C needed from early summer till fall frost, plus such important minerals as iron.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Soil and Health

by Dorothy Ellard

The main project for the Federated Women's Institutes of Canada this coming year is to be "Soil Conservation". When one considers, it is very easy to see where the heading of this article ties in with this project.

In the January issue, 1950, of "Good Housekeeping" the question is asked "Do vegetables grown in different soils, in various parts of the country, have the same nutritive quality?" Answer: "No, the soils fertility is reflected in the nutritive quality of vegetables. Soil with rich mineral fertility yields vegetables with high nutritive quality". This surely shows the need for conservation of the top soil, in which our food grows. In an address given by Prof. J. H. Ellis of the Soils Department, University of Manitoba on the occasion of the annual meeting of the Manitoba Co-operative Wholesale Ltd., in Feb. 1949, he made some very startling remarks on "Soil and Health" in relation to plants, animals and men. In the Bible it says "The dry land was called earth, and it was good". Prof. Ellis says, and I quote, "What do we imply by goodness, when speaking of the products of the earth, truly it is good to have an abundance, but abundance of itself is not goodness. To be healthy is to be well fed. If the goods produced by farm and garden satisfy all food requirements, so that bodies can be kept healthy, then the works of our hands are good". (end of quotation) On the other hand, the effects of the lords of creation have not been good, if the women develop goitre, the babies have rickets, if the men cannot work because they are crippled with arthritis, if the girls have anemia, if the sows produce litters of hairless pigs, if the chickens have crooked bones, and the hens lay soft shelled eggs. All these disorders are evidences of malnutrition and faulty feeding and also, indirectly, of impoverished soil on which said foods are grown. Quebec W.I. members can show the way in practising soil conservation in their own gardens, by composting all waste material, leaves, weeds, etc., made into compost heaps and the compost spread onto the garden. This helps to build up the top soil and to increase the fertility of the said soil. The vegetables grown in a composted garden will be of a high nutritive quality. The health of the family will be improved and we shall be practising our motto, "For Home and Country." In other words, the health of the nation is to a large extent in the hands of the farmers and the food producers.

This is a very great responsibility and the members of Women's Institutes everywhere share this responsibility.

We can get our soils analyzed and if it needs certain minerals we can encourage our men folks to see that the soil where we live gets what it needs, and also see that the crops that are suited to that soil are grown on it. We must help ourselves or it surely follows that suffering by ill health will be the result of impoverished and neglected soil. We must fulfil the Divine injunction, "Replenish the earth and subdue it."

Health will not come from legislation, but we can with God's help and our own efforts secure it from the earth. McCarrison wrote; "Out of the earth are we, and the plants and animals that feed us, created and made, and to the earth we must return the things whereof we are made, if it is to yield again foods suited to our needs".

Books on soil depletion and possible restoration of fertility are as follows:

Farming and Gardening for Health or Disease.

By Sir Albert Howard. Published by Faber & Faber, 24 Russell Square, London, England.

Gardening with Compost.

By F. King.

Condensations in inexpensive booklet form can be had on many books dealing with soil and health from the Canadian Health Aids, Federation Life Building W., Toronto, Ont.

The Month with the W.I.

Christmas, with all its joys, was the theme at most Branch meetings in December. 17 Counties reported, and for the busy holiday season, that was splendid. In the midst of all the Spring activities, which will be upon us when this Journal goes out, let us not forget to send in reports regularly and promptly. If your branch does not appear you can be sure it is just because we have not heard from you. We want to hear from every one. (Editor's note. Once again Vaudreuil County's unfortunate position at the end of the alphabet caught up with it and the news was cut in a recent issue. We apologize most sincerely and to make amends give it first place this time.)

Vaudreuil: Cavagnal reports that they are very proud of their member, Mrs. Wilson, who won first place with her essay, "A Country Woman's Day". The meeting featured carol singing and 30 lbs. of candy, donated by the members, was sent to veterans in hospital. \$25 to the Hudson War Memorial and \$10 to the Watt Scholarship

had been reported previously. Vaudreuil-Dorion branch reports the "adoption" of another family overseas, and a donation of \$25 to the Watt Memorial. A party was arranged for the children and \$75 given the local Community Play Ground. Members of the Ste. Annes W.I. were guests at their "birthday party".

Argenteuil: Arundel enjoyed a social evening and planned an entertainment for the kindergarten children. A sick member was remembered with a gift and a parcel sent overseas. Brownsburg also held a party and sent 23 boxes of home made cookies and candies to the veterans in hospital. Frontier donated \$15 to the Children's Memorial. Jerusalem-Bethany gave a donation for kitchen equipment in the new Legion Hall and held a party for children of pre-school age. Lachute reports a most instructive course in glove-making given by Miss Birch. Two parcels of candy were sent overseas. Morin Heights held a party after a short business session while Pioneer gave a treat to the children of their community.

Beauharnois: Nitro reports an excellent meeting with three new members. A prominent dentist from Valleyfield gave a lecture on Oral Hygiene.

Bonaventure: Black Cape enjoyed a paper entitled "Christmas", prepared and read by a member. This was to be used later for the monthly broadcast over CKNB. Marcil enrolled a member in the C.A.C. and enjoyed the reading of a letter from the English W.I. which they "adopted". New Carlisle report sending \$76.29 to the United Appeal for Children and \$188.81 was collected for the Poppy Fund. Port Daniel sent a parcel overseas and enjoyed a member's essay, "Work of the A.C.W.W. in promoting peace and good will". This reading would later be used for the W.I. broadcast over CHNC. Shigawake packed no less than 7 parcels for overseas and made preparations for a party to include every child in the community. (This county must be congratulated on its radio work, one of our finest forms of publicity.)

Brome: South Bolton sent boxes overseas and made preparations for the annual party for the children. Sutton members had fun drawing names and exchanging gifts. \$100 was received to be used for a plaque on the new town clock.

Chat.-Huntingdon: Aubrey-Riverfield held "Social Service Day," an all-day meeting, and made four warm quilts. One was sold and the others given to a needy family. A donation of toys was sent to the Verdun Family Welfare. Dundee had a talk by the Rev. A. E. Hagar on the subject "The Madonnas of the Artists". \$10 was voted for the Q.W.I. Service Fund. Franklin Centre reports a large meeting and four food parcels sent overseas. A programme in keeping with the season was rendered and a sale held of home cooking and candy. Howick heard a talk on "Conditions in England", and held a jam and jelly shower for the Barrie Memorial Hospital. Huntingdon bought and donated several dozen spoons to the High School. At the meeting the "Christmas Story", by O. Henry, was read.



Mrs. H. Ellard, President of Gatineau County W.I. visits Breckenridge branch. She is in centre front on the ground with Mrs. Lusk, a one-time provincial president, on her right. The mayor, Mr. H. Bell, and his wife were also guests and are shown at right in the back row.

Compton: Bury donated \$20 to the Watt Memorial Scholarship and enrolled 3 new members. Brookbury reports profits of \$100 on recent card parties. Cookshire held a successful rummage sale and made donations to the Junior Red Cross and the School Rink. Canterbury voted \$10 to help with the Scotstown school lunch programme. A sale of articles at the meeting resulted in a contribution to Save the Children Fund. East Clifton sent baskets of good things to the aged and shut-ins while East Angus enjoyed a film at their meeting and voted \$30 for community projects. Sawyerville reports a sale and two card parties which were very successful. Their meeting was a social one, and the teaching staff were welcome guests. Scotstown branch presented a member with a gift for outstanding service and contributed \$10 to Save the Children.

Gatineau: Breckenridge held a quiz on "Recent News Events" and a White Elephant sale resulted in a tidy sum for the funds. Eardley reports a five-day course in handicrafts given by Miss Birch. This branch collected \$87.85 for the Institute for the Blind. Boxes were packed for the shut-ins. Kazabazua sent a special parcel overseas and remembered all the house-bound folk in the community, as did Rupert. This branch held several social events to raise funds. Wakefield collected \$61.25 for the Poppy fund, and they also sponsored the sale of Christmas seals in their district. Public subscriptions, solicited by this branch, resulted in \$142.94 for the school lunch fund. Wright reports a meeting with special recipes exchanged and ideas for novel holiday decorations. This branch reports a very large Blue Cross enrolment and the members are very enthusiastic about this form of public service.

Jacques-Cartier: Ste. Annes branch held their annual bazaar, which was most successful. The meeting took the form of a social evening. Donations were made to all the local churches and the Nursery School.

Missisquoi: Cowansville sponsored a most excellent weaving course given by Miss Birch. A reception was held for the teaching staff of the school and the patients in the local hospital were made happier by gifts from this branch. Dunham reports a tea and food sale and sent



Wyman W.I. The Pontiac County presiding, Mrs. Earl Findlay, who visited this branch, is at extreme left of front row.

an overseas parcel. St. Armand remembered the shut-ins and provided a treat for the school children. Stanbridge East voted \$10 for the Community tree, and an equal amount for the needy. Fordyce gave donations to the local hospital, the Children's Memorial and the Q.W.I. Service Fund. Two members gave the monthly broadcast, their subject being "Teaching as a Career." St. Armand and Fordyce enjoyed an official visit from the county president.

Montcalm: Rawdon reports sending a special parcel to an English W.I. and the recipient of their regular parcels sent a gift to the branch in token of gratitude. Rawdon recently celebrated its 115th anniversary and a party was given, when Miss Daly, who founded the branch, was presented with a Life-membership.

Pontiac: Fort Coulonge heard a paper on "Education" and remembered the sick and shut-ins. Beechgrove held a sale and exchanged gifts at their meeting. Wyman members brought donations of good things to be sent to the needy. A story of the "Two Magi" was read and everyone took part in the singing. The Bristol Busy Bees sent boxes of good cheer and their meeting was a social one.

Richmond: Cleveland answered the roll call with a recipe suitable to the season and an amusing auction of aprons and other articles was held. Dennison's Mills reports donations of \$10 each to the community tree, and the Winter Road Association; while Spooner Pond gave \$15 towards buying a radio for Melbourne School. Ship-ton held their annual supper for W.I. members and their families, which was very much enjoyed. Richmond Hill gave a "Baby Shower" and Melbourne Ridge held a social evening and dance.

Rouville: Abbotsford reports a very pleasant meeting with a large attendance. Parcels were sent overseas; and a sale of handmade articles netted the sum of \$19.61 for the funds.

Shefford: Granby Hill netted \$13.40 from the sale of cards and sent a large box for the ward patients in an old ladies' home. South Roxton were busy with preparations for a supper to be held during the holiday and flowers were sent to a member who was ill. Warden made plans

to send cheer to the shut-ins and each member answered the rollcall with a gift to be sent to sick children in the hospital.

Sherbrooke: Ascot members enjoyed a party meeting and took time to pack baskets for shut-ins. Apples were donated for the school children's tree. Belvidere held a sale and tea, with candy and books for the children. Brompton Road held a bread-baking contest and voted \$10 for the school party. Cheery River combined their meeting with a sale of handicrafts and home cooking. Lennoxville donated \$5 toward upkeep of the local school rink. A member, Mrs. L. Parker, was presented with a Life Membership in the W.I. Milby held a sale of Indian Lace and home made candy. A donation was made to the Anti-T.B. League.

Stanstead: Ayer's Cliff reports sending their allotment to the Watt Memorial, and \$10 was given to the local library. Gifts were sent to the Children's Memorial and two needy families were remembered with "good cheer". Beebe held their annual party and collected gifts for children in hospital. Two overseas parcels were sent and a basket to a shut-in. Dixville contributed \$10 toward presents for local school children and each member gave a gift to be sent through the Junior Red Cross to a Montreal Hospital. Fitch Bay held a tea and card party and sent a large parcel to the Children's Memorial. Hatley reports various donations, \$10 to the library, \$5 to each of the two Sunday Schools, \$5 to help buy lights for the community "tree" and \$10 to buy games for the school. It would seem that North Hatley was having a friendly competition with Hatley as they, too, kept their treasurer busy with a "give away" programme, as follows: \$25 for "Adopted" Greek boy, \$25 for school library, \$5 for supplies to needy family, and \$16 to the Q.W.I. Service Fund, to complete their quota of \$1 per member. Stanstead North reports serving hot soup to all rural school children attending Stanstead College. \$10 was voted the Library to buy books for "All Canadian Bookshelf" and \$10 to the Q.W.I. Service Fund. Way's Mills sent a wonderful assortment of good things to the Cross-in Hand W.I. Sussex and from their last meeting went a parcel of toys to the Crippled Children's Hospital.

Office News

Miss Jean Bovey of the Women's Voluntary Services, Montreal, has asked the Q.W.I. office to call the attention of the members to the following announcement: "Will those branches, who may be sending Personal Parcels through the United Emergency Fund for Britain, note that the alternative address on Customs Declaration must now be:

U.E.F.B. c/o Ministry of Food,
Buffer Depot L505,
Cockfosters, Middlesex.

instead of the Derby address as in paragraph 6 of our October circular."

Miss Bovey adds, "Owing to the new austerity programme in Great Britain I am very glad your members are continuing to carry on with this project."

The Canadian Cancer Society are still asking for old cotton to be used as wrappings for dressings. Particulars were given in the last letter from the Q.W.I. president, Mrs. Thomson, but you might like to have them repeated. This cotton must be clean and not less than 18 inches square. Old sheets and pillowslips are very suitable. The cloth need not be made into smaller pieces but they do stipulate the above minimum size. The address is:

Canadian Cancer Society,
1518-1522 Sherbrooke St.,
Montreal 25.

And please remember your provincial convenor of Welfare & Health, Mrs. H. Ellard, asks all local convenors of that department to mention all such donations in your annual reports this year.

Since Newfoundland has come into the Confederation, contacts have been made by the Jubilee Guilds of Newfoundland and Labrador with the W.I. in other provinces and an exchange of information and ideas established. A copy of the 13th annual report of that organization has been received at the Q.W.I. office and as their aims are

so similar, Institute members will be interested in the following items taken from that report. They have 104 groups with a total membership of 3225. Their motto is "Confidence, Courage and Unity", and their objectives are: social betterment, education of the homemaker, and service to the community.

Seven field workers are employed, who visit the various districts, staying two or three weeks in a place and giving instruction in weaving, sewing, cooking, home-nursing, recreation, and encouraging social work in general in the community. A marketing service is also conducted by the provincial organization for woven goods made by the members.

The Jubilee Guilds are affiliated with the A.C.W.W. and are looking forward to closer ties with the Institutes throughout Canada. Mrs. J. A. Winter, St. John's is the president and Miss Anna Templeton, of the same place, the Organizing Secretary.

In an address, which concludes this report, Mrs. Winter makes the following statement: "Such expressions of interest in our work in this new province from our sister organizations in Canada, should, I feel sure, be a great encouragement and incentive to us all."

Public Relations In Community Life

"The individual must recognize and assume his share of responsibility for group action, the strength of which is commensurate with the interest of that group's members," Prof. W. E. Tolton, director of public relations, Ontario Agricultural College, declared the other day. He was speaking to the Simcoe area convention of the Federated Women's Institutes of Ontario at Barrie.

His subject was "Public Relations and the Community", and he quoted Charles Edison, former secretary of the United States Navy and son of the late Thomas A. Edison, who said that "If civilization is to survive, we must speed up our social sciences so that products of the physical sciences will be used constructively instead of destructively."

Characteristics

Prof. Tolton argued that Public Relations is in the realm of social science and that social science is the product of human engineering. He held that the true human engineer must have personality and charm, backed by motives and actions that are directed to a common good.

In order to develop enduring strength he put forward four characteristics that should be encouraged. They are self-discipline, courage, imagination and timeliness. These four cardinal characteristics rest on alertness, energy, planning, research, judgment, humility, sacrifice, faith, sincerity, service, honesty and understanding.

"It is the privilege and opportunity of the Public Relations endeavour to encourage development of each of these characteristics," he said. "The motto of the Women's Institute is for 'Home and Country'. Your Institute memorialized the public relations job done by Mrs. Watt and Mrs. C. C. James and everyone of you are potential public relations officers charged with the development of your Women's Institute."

Look for Needs

"When you return to your homes, will you not look about you and see what can be done to develop your community? Our democratic way of life furnishes us with the privilege of serving our communities. Local needs may merit your attention. These may include lighting for the sports centre of your boys and girls throughout the fall and winter nights; development of entertainment to supplant the beer parlour menace; development of debating and acting, or pursuit of hobbies or shows."

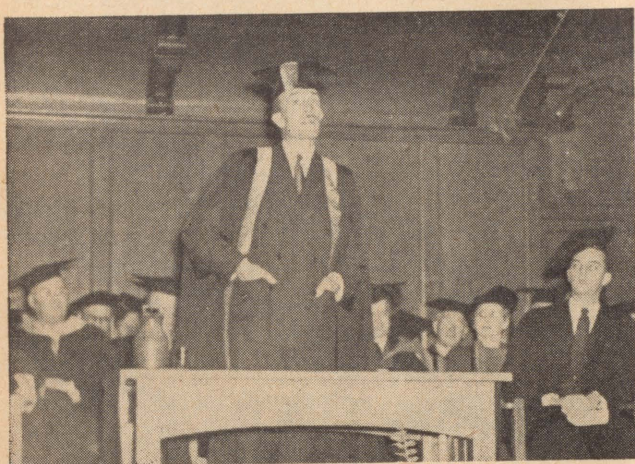
"Such questions as the educational facilities of your community, the conservation of natural resources and the application of modern science in your community would, no doubt, be of great interest and value. Best things are hardest to get, but are worth waiting and working for," he said.

(By permission of Ontario Agricultural Review)



THE COLLEGE PAGE

The Annual Assembly



Principal James at the Annual Assembly.

It was a happy inspiration of the Vice-Principal to arrange for one occasion during the academic year when staff members and students should meet together in Assembly, with all the colour of academic ceremonial, to hear an address from the Principal of the University. Advantage is taken of the occasion for the Principal to make an official visit to Macdonald College where he makes a tour of inspection of the various departments, meets staff members and students, and presents prizes and medals won during the previous session.

Ordinarily, the Assembly is held early in the session, usually before the middle of November. This year, however, the November date was given over to the War Memorial Address, to take advantage of the presence in this country of Lord Wavell, who was invited to give the fourth Address. The Assembly, then, was held on January 26th, and followed its traditional pattern of academic procession, welcome to the Principal from the President of the Students' Council, presentation of prizes, address by the Principal, and reply by the Vice-principal.

Dr. James, lately returned from India, brought greetings from Indian university students, who, he said, are keenly interested in all things Canadian. His descriptions of university life in India were colourful, and were heard with keen interest by his audience.

Dr. James stressed that the primary purpose of any university is not to provide its graduates merely with tickets for better jobs than they might get without the training it provides. The true function of a college education is to help men and women develop their minds and characters so that they may make a greater contribution to the world in which they live. The whole future of democracy, and of Western civilization itself, depends on the fostering of the art of solving problems, of understanding one's neighbours, and on the scientific ability to handle one's environment he stated.

He reminded his audience of the fact that all the training facilities at the College were due to the wisdom, the foresight, and the generosity of Sir William Macdonald, who, in addition, had also given the funds to endow, at McGill, the Macdonald chair of moral philosophy, the Kingsford chair of history, the Dawson chair of geology, had built the physics and engineering buildings, had provided a Students' Union, had endowed travelling scholarships in Arts and Law, and had made many other gifts to the University.

New Quarters for Agronomy Crops

AFTER many long years of wishful thinking and hopeful planning, the Agronomy Department now has a greenhouse of its own. The days when Agronomy, Plant Pathology and Entomology all competed for bench



space in the biology greenhouse are gone, and everyone is happy about the situation.

The new house has been built directly in front of the Agricultural Engineering Building, just a few feet east of the Horticulture house, and is a completely modern one. It measures 25 by 62 feet, with an attached work-room and potting room, and connections have been left so that it will be an easy matter to extend its length should this prove necessary some time in the future. Inside, it is divided into four compartments, each with its own temperature and light controls, so that it can operate independently of any other. Thermostats in each compartment have been installed to control the heating, so that the house can be run at constant temperature without anyone having to go in to turn on or turn off the steam.

Special lighting fixtures, also automatically controlled will be installed later, so that crops can be grown under different light conditions, but studies on this are still being made, to be sure that the best possible system will be put in. Fluorescent tubes would be the most economical and the most practical, but there still is some question as to whether this type of light can be adjusted to imitate daylight as well as some other kind.

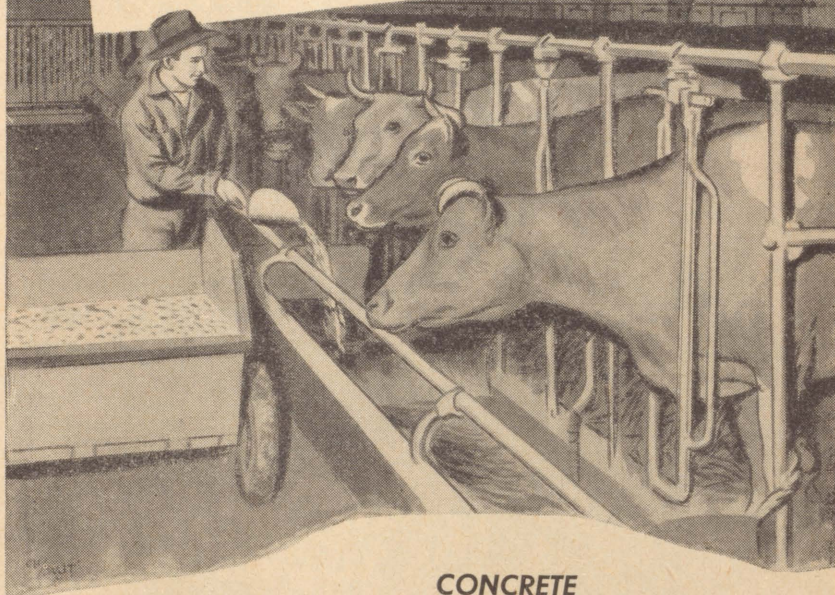
The new house, which is already in operation, will result in speeding up the work of the Agronomy Department. In cereal work, for instance, crosses can be made during the winter with comfort for the technician, and with no delays on account of possible bad weather. Three generations can be grown in one calendar year: two in the greenhouse and one in the field, as compared with only one if all the work had to be carried on outside. With root crops, selfing of the crop will be done inside under controlled conditions, with no wind to contend with, and no chance of loss through rainstorms at the wrong time. A whole year will be saved in the production of seed of any one strain. In clover selection, where a great deal of work is waiting to be done, the new house will be a blessing with its lights which will permit a careful study of the behaviour of different clovers under varying light conditions.

The house was built by Lord and Burnham, and the major part of the cost was borne by certain well-wishers of the College.

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